Work	Order	ID <sup>*</sup>	11	5512

Page 1

April-02-14*11:15:49 AN	1		^115	らコンペ						Page I
Item ID: D3391-C Revision ID: Item Name: Aft Tube	O25 Assembly	Ac	cept	*N900	040	100	<b>)</b> * 8	Setup Star Stop	17	S1* S2*
Start Date: 4/02/14 Required Date: 4/16/14 Reference:	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item   Customer:	ID:				"IN	<b>.</b>
	and the second s	nte: 1404-02	Γooling: SPC (Y/N):		ate:		F	Run Star Stoj	<b>Vi^</b>	R1*
Sequence ID/ Work Center ID		iie.	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
D3391	Revision Nbr		4							
*100  *100  Mori Seiki  Mori Seiki CNC Lathe Large	MORI SEIKI CNC LATHE LA  Memo  Turn as per Folio I  ****REMOVE ST		0.00  0.00  Dwg D3391 Rev:   CHINIG MARKS***			Ť		£		KC 14-04-0 MML
110 *110* QC Quality Control	QC2- Inspect parts off machine  Memo	FAI/FAIB	0.00					\$		14/04/0/h1
112 <b>*110*</b> QC Quality Control	QC5- Inspect part completenes  Memo	s to step on W/O	0.00 DAS 27 9.89	iliy			·	<u></u>		

Page 2

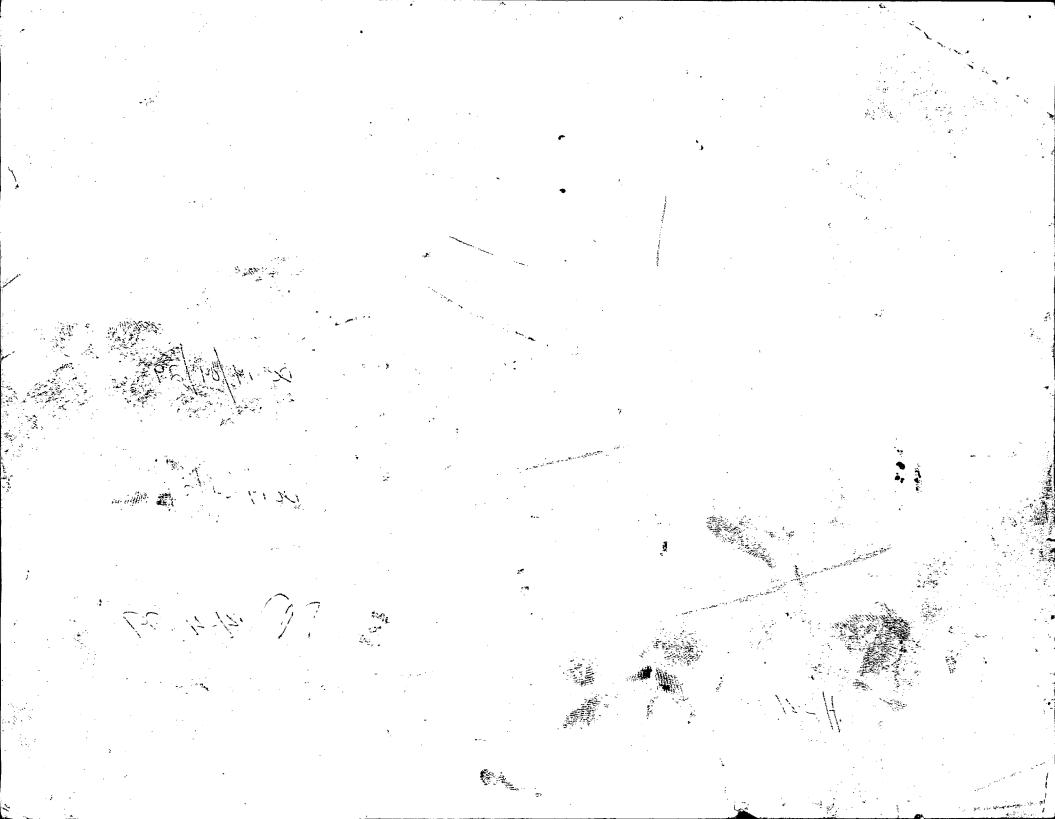
April-02-14 11:15:49 AM D3391-025 Item ID: Accept \*N900040100\* Setup Start **Revision ID:** Stop Item Name: Aft Tube Assembly Start Date: 4/02/14 \*1\* Start Otv: 1.00 **Cust Item ID:** Required Date: 4/16/14 Rea'd Otv: 1.00 \*1\* Customer: Reference: Run Start Process Plan: Date: Tooling: **Approvals:** Date: Stop OC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Insp. **Work Center ID** Description **Run Hours** Code **Qty** Oty Number Stamp 120 0.00 DAS on/ 14/04/27 1 HAAS CNC VERTICAL MACHINING #1 14 \*120\* 9-89 HAAS 1 0.00 Memo HAAS CNC vertical machine #1 1-Machine as per Folio FA 599 Rev. A & Dwg D3391 Rev: 2-Deburr 130 OC2- Inspect parts off machine FAI/FAIB 0.00 ml 14/04/27 \*120\* OC 0.00 Memo Quality Control 140 QC8- Inspect parts - second check 0.00 \*140\* OC 0.00 Memo Quality Control \*\*\*INSPECT INSIDE BORE\*\*\*



Page 3

April-02-14 11:15:49 AM D3391-025 Item ID: Accept \*N900040100\* Setup Start **Revision ID:** Stop **Item Name:** Aft Tube Assembly \*NS2\* **Start Date:** Start Qty: 1.00 \*1\* 4/02/14 **Cust Item ID:** Required Date: 4/16/14 Req'd Qty: 1.00 \*1\* **Customer:** Reference: Run Process Plan: \_\_\_\_\_ Date:\_\_\_\_ Approvals: Tooling: Date: Stop Date: SPC (Y/N): Date: Operation Sequence ID/ Set Up/ Tool ID Tool # Plan Accept Reject Reject Insp. **Work Center ID** Description Number Stamp **Run Hours** Code **Qty** Oty 150 0.00 Skidtubes \*150\* Skidtubes 0.00 Memo Skidtubes 1-Drill (PILOT HOLE) aft cap holes per Dwg D3391 using DT8803 0.00 **BENDING MACHINE - SKIDTUBES** \*160\* CNC Bend 1 0.00 CNC Delta 100 Bender Form as per Dwg D3391 Using Bend Prog 3391025 170 QC5- Inspect part completeness to step on W/O 0.00 \*170\* "OC 0.00 Memo **Quality Control** 

H-4.15



5-Open wearplate holes to 0.297" and c'bore as per dwg D3391

7-Deburr

8- Scribe batch # on fwd end

6-Open up all float bag holes to 0.328" and c'sink as per Dwg D3391.

Page 4

#### Work Order ID 115512

\*115512\*

Page 5

April-02-14 11:15:49 AM

Item ID:

D3391-025

4/02/14

Accept

\*N900040100\*

Setup Start

**Revision ID:** 

Start Date:

Item Name:

Aft Tube Assembly

Start Oty: 1.00

Req'd Oty: 1.00

\*1\* \*1\*

**Cust Item ID:** 

Customer:

Reference:

Approvals:

Required Date: 4/16/14

Process Plan: Date:

OC:

Date:

Tooling:

**SPC (Y/N):** 

Set Up/

**Run Hours** 

Date:

Date:

Run Start

Stop

Stop

Sequence ID/ Work Center ID

190

\*100\* OC

Quality Control

Operation Description

QC5- Inspect part completeness to step on W/O

Tool ID

Tool # Plan Code

Accept Otv

Reject Otv

Reject Number

Insp. Stamp

200

\*200\*

HandFinish Hand Finishing Chemical Conversion Coat per OSI005 4.1

0.00

Memo

Memo

0.00

De 14/05/14

210

OC.

Quality Control

QC7-Inspect Chemical Conversion Coat

Memo

0.00

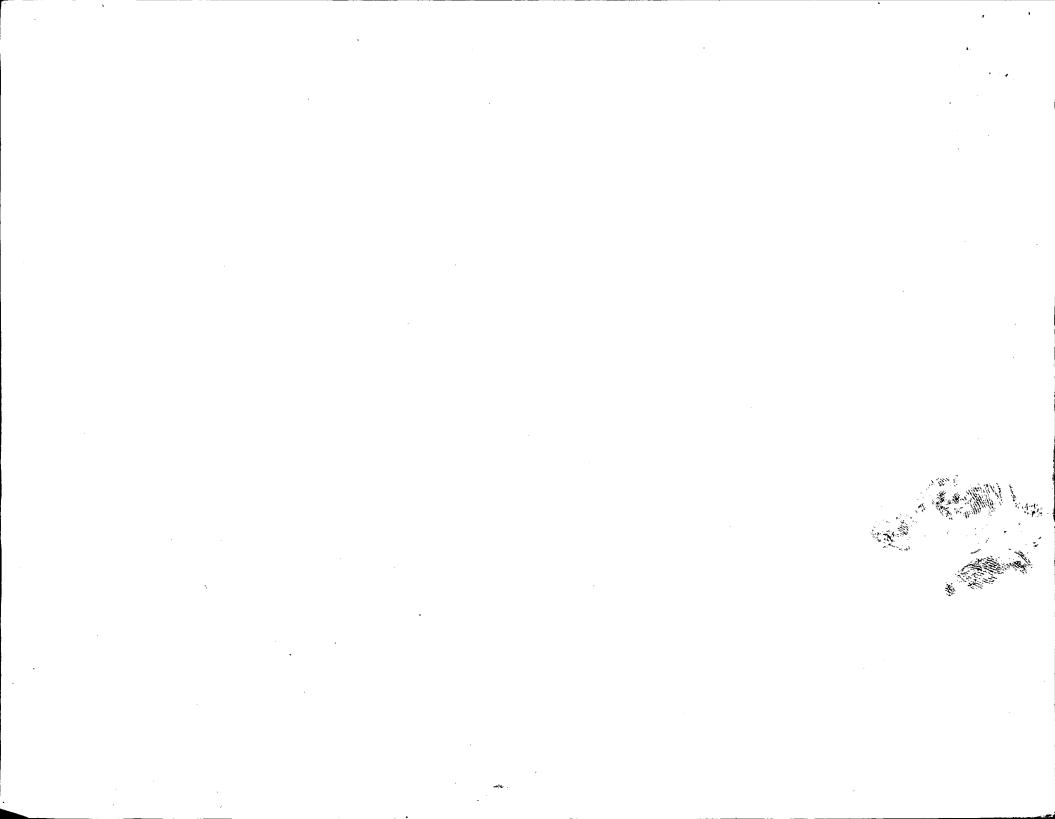
0.00

14-5-14

Page 6

April-02-14 11:1	15:49 AM										
Revision ID:	D3391-025 Aft Tube Asse	embly		Accept	*N900	<b>0401</b>	<b>೧</b> ೧*		,	S1* S2*	
Start Date: Required Date: Reference:	4/02/14 4/16/14	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item I Customer:	D:			IV	. 1/	
Approvals:	Process Pla	nn:	Date:	Tooling: SPC (Y/N):		nte:			top *N	R1* R2*	
Sequence ID/ Work Center ID 220 *>>>>> * Skidtubes Skidtubes	,	A/R Mag exp. date : cure time 1	acers as per dwg D3391 nabond 6398 Batch: <u>12</u> 1412 30 2hfs as per QSI0015 ossbolts flush		Tool ID	C	lan Acco	ept Reject Qty	WEA.	Insp. Stamp	
230 <b>*ク3↑*</b> QC Quality Control		4- Touchu	oll using #9 drill o Magnabond oleteness to step on W/O	0.00	P 5/15						•

i en



Quality Control

### \*115512\*

Page 7.

April-02-14 11:15:49 AM Item ID: D3391-025 Accept \*N900040100\* Setup Start **Revision ID:** Stop **Item Name:** Aft Tube Assembly \*1\* **Start Date:** Start Otv: 1.00 4/02/14 **Cust Item ID:** Required Date: 4/16/14 Rea'd Oty: 1.00 \*1\* **Customer:** Reference: Start Run Process Plan: Date: Approvals: Tooling: Date: Stop Date: QC: SPC (Y/N): Date: \*NR2\* Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Reject Accept Insp. **Work Center ID** Description **Run Hours** Code Qty Otv Number Stamp 235 Pressure Wash per OSI005 4.3 0.00 1 26145-26 \*\*\*\*\*\* HandFinish 0.00 Memo Hand Finishing AND REALODINE AS PER PAR09-043 240 White Gloss(Ref:4.3.5.1) per OSI005 4.3-Alum 0.00 \*240\* Powdercoat 0.00 Powder Coating FINISH TIME: 250 QC3- Inspect Part Finish 0.00 f Il w/07/17 0.00 Memo

W	ork	Order	ID	11	5512	2
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Page 8

April-02-14 11:15:49 AM D3391-025 Item ID: Accept \*N900040100\* Setup Start **Revision ID:** Stop Item Name: Aft Tube Assembly \*1\* **Start Date:** 4/02/14 Start Otv: 1.00 **Cust Item ID:** Required Date: 4/16/14 Req'd Qty: 1.00 \*1\* **Customer:** Reference: Run Start Approvals: Process Plan: Date: Tooling: Date: Stop Date: \_\_\_\_ SPC (Y/N): Date: Sequence ID/ Operation Tool ID Tool # Plan Set Up/ Accept Reject Reject Insp. **Work Center ID** Description Run Hours Code Oty Otv Number Stamp 260 0.00 HandFinishing \*260\* HandFinish 0.00 Memo Hand Finishing 1-Install inserts as per Dwg D3391 2-Install Aft Cap as per Dwg D3391 A/R Sikaflex-241/-291 M(12945] Sikaflex expiry date: 14 1/ DAS 3- INSTALL WEARPLATES AS PER DWG 270 QC5- Inspect part completeness to step on W/O 0.00 0.00 Memo Quality Control 280 Identify as per dwg & Stock Location. W\O \*280\* Packaging 0.00 Memo Packaging

Ŵ	ork	Order	ID	115512
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Quality Control

## \*115512\*

**Cust Item ID:** 

**Customer:** 

Page 9

April-02-14 11:15:49 AM Item ID: D3391-025 Accept \*N900040100\* **Revision ID: Item Name:** Aft Tube Assembly **Start Date:** 4/02/14 Start Qty: 1.00 Required Date: 4/16/14 Req'd Qty: 1.00 \*1\* Reference: Approvals: Process Plan: Date: **Tooling:** QC: Date:\_\_\_\_\_ SPC (Y/N):

Start Run Date: Stop Date:

Setup Start

Stop

Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Insp. Work Center ID **Description Run Hours** Number Stamp Code Qty Qty 290 QC21- Final Inspection - Work Order Release 0.00

\*290\* QC 0.00 Memo

MLD 14-07-18

#### **Picklist Print**

April-02-14 11:15:52 AM

Work Order ID: 115512

\*115512\*

Parent Item:

D3391-025

\*D3391-025\*

Parent Item Name: Aft Tube Assembly

**Start Date:** 4/02/14

Required Date: 4/16/14

Page 1

Start Qty: 1.00

Required Oty: 1.00

Comments:

IPP Rev B 06-02-07

IPP Rev:C

ECN773 dwg rev. D EC 06-03-28

Update Manuf. Instructions JLM

IPP rev D 07.03.20 revF dwg EC

IPP rev E 07.11.07

rev G dwg ecn 1053p EC verified by: DD DD verified by: EC

IPP Rev:F 07-11-13 ECN 1056

IPP Rev:G 08-09-10 revH as per dwg DD verified by:EC IPP Rev:H

11.11.14 AS PER REV.I DD verified by:JLM

	1.11.14 A3 FER N	EV.I DD Verifie										
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Status Issued
D4095-047		Manufactured	No		-	260	Each	18.0000	1	1		1
*D4095-04 Wearpad Assembly	17*								**	H	Lud	04/17
				Location		Loc	<u>Oty</u>	Loc Code				
				FP001	•		18	•			<u>-</u>	
					102241		2				-	
D4095-049		Manufactured	No	•	108289	260	16 Each	13.0000	1	_ <del>V \</del>	-	
	40+	Manuractureu	140			200	Lacii	13.0000	ا المالة	1	001	. d. 1.
*D4095-04 Wearpad Assembly	49*								**		)UL	14/07/12
				Location		Loc	<u>Oty</u>	Loc Code				
•				FP001			12		_		-	
					109670		12		_	K/	-	
				FP002			1		_		-	
					102216		1		_		-	
D6014-090		Manufactured	No			100	Each	69.0000	1	1		
*D6014-09 ALUMINUM EXTRUSION					,				**			
				Location		Loc	<u>Oty</u>	Loc Code				

Location	Loc Qty	Loc Code
LG003	69	
79742	17	
<b>&amp;6063</b> )	52	

\_\_\_\_\_ mmil 14/04/02

April-02-14 11:15:52 AM

Work Order ID: 115512

\*115512\*

Parent Item:

D3391-025

\*D3391-025\*

Parent Item Name: Aft Tube Assembly

**Start Date:** 4/02/14

Required Date: 4/16/14

Start Qty: 1.00

Required Qty: 1.00

D3670-4-200

Manufactured

230

Each

300.0000

\*D3670-4-200\*

Bushing

<b>Location</b>	Loc	c Qty	Loc Code
FG		10	
87709		10	
LG001		290	
103880		39	
109108		242	
96240		9	
	270	Each	75.0000

D2646

Manufactured

\*\*

Aft Cap

Location		Loc Oty	Loc Code	
FG		4		
8	5848	2		
9	0495	2		
FP001		71		
1	03306	14		
1	07857	1		
1	10816	18		
1	13830	38		X(

April-02-14 11:15:52 AM

Work Order ID: 115512

\*115512\*

Parent Item:

D3391-025

\*D3391-025\*

Parent Item Name: Aft Tube Assembly

**Start Date:** 4/02/14

Required Date: 4/16/14

Start Qty: 1.00

\*\*

\*\*

Required Qty: 1.00

D3672-1

Manufactured

270

Each

1,420.000

Phenolic Washer

<b>Location</b>	Loc Oty	Loc Code	
FG	10		
85222	10		
ST060	1410		
103845	4		
112218	500		
113581	500		
93886	224		
99099	182		<u></u>
	260 Each	9,937.000 14	14

ALS4-1032-130

AELS4-1032-130 Purchased

No

\*AI S4-1032-130\*

Rivnut

Location	<u>n</u>	Loc Oty	Loc Code	
FP001		9832		****
	M128649	9832		- VIY
ST279		48		
	M128211	48		
st510		57		
	M126109	57		

April-02-14 11:15:52 AM

Work Order ID: 115512

D3391-025

Parent Item Name: Aft Tube Assembly

Parent Item:

ALS4-1032-225

AELS8-1032-225 Purchased

Purchased

No

No

\*115512\* \*D3391-025\*

270

Each

**Start Date:** 4/02/14

Required Date: 4/16/14

Start Qty: 1.00

Required Qty: 1.00

\*\*

\*AI S4-1032-225\*

Location	<u>1</u>	Loc	Oty	Loc Code				
FG			. 30					
	M127028		30					
FP001			1000					
	M128649		1000					
ST280	•		426			<del></del>		
	M127028		10					
	M128179		416			<u>8 y</u>		
st555			34				•	
	M127092		34					
		270	Each	2,208.000	6	6	1	,

\*\*

1,490.000

AN3C4A

<b>Location</b>	Loc Oty	Loc Code	
FG	20	6	
122814	20	M128879	V6
ST350/513	1000		
M128606	1000		
ST512	3		
124221	3		
ST513	1185		-
125388	122	•	
M127410	1		

62

1000

M127832

M128634

		Date:						_				`	TAACT
		Date:			WORK ORDER NON-	·CC	ONFO	RMANCE / UPD		ork Ordor ur	ndata only	_	AEROSPACE
		Date.					<u> </u>			•	,		
er:					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
_					Rework			Skid-tube (	Crosstube	]	Water Jet		Engineering
۱o. <u> </u>					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.		Quality
					Use-as-is		Therr	· —	Finishing	Rec/Stor		_	Other
10					Suspected Unapproved			Large Fab C	composite [	J	Supplier		
				Desci	ription of work order update		Initial	Action		Sign &		Ţ	
	Date	Step	Qty		or non-conformance	Ch	nief Eng	Descripti	ion	Date	Verification	- {	QC Inspector
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		]											
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		ļ											
												Ì	
						FA	ULT CAT	regory	*				
ng Ge	ar				General		_						
В	ending			L	Bend		Folio/F	rogram		Outside Dim	ensions	P	ressure/Forced
c	entre No	t Concer	ntric		BOM/Route		Grain			Over/Under	tolerance	$\Box$ s	et-up
Cı	racks				Broken/Damage/Defect		Hardwa	ire		Part Incorred	:i [	Т	emperature/Cure
Cı	rimp/Kir	k/Ripple,	/Wave		Burrs		Inspect	ion Incomplete/Unqua	alified	Part Lost/Mi	ssing	$\neg$ v	Veld
Ci	uffs				Contamination		Instruct	ions Incomplete/Uncl	ear	Part Moved	Γ	$\neg$ <sub>v</sub>	Vrong Stock Pulled
C	rushing				Countersink		Misalig	ned/off center		Positioned W	/rong	_	
Н	eat Trea	it			Cut Too Short		1			4	_	$\neg c$	ther
Ir	spection	n Strip in	Tube		Drawing		Misread	d	<u> </u>	·			
$\square$	1arks/Ch	atter			Drill Holes	-	4						
T	urning S	equence			Finish	Г	Out of	Calibration					
V	/ave/Tw	ist in Tub	e		Fit/Function		4						
	Io	Date  Date	Date:  Da	Date:  Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date: Date	Date:  Date:  Date:  Date Step Qty  Description  Descript	Date:    Disposition   Rework   Scrap   Use-as-is   Suspected Unapproved   Date   Step   Qty   Description of work order update   or non-conformance   Date   Step   Qty   Description of work order update   or non-conformance   Date   Step   Qty   Description of work order update   or non-conformance   Date   Step   Qty   Description of work order update   or non-conformance   Description of work order update   Description of work order update   Or non-conformance   Description of work order update   Description of work order   Description order   Description orde	WORK ORDER NON-Co	WORK ORDER NON-CONFORM    Date   DISPOSITION   Rework   Scrap   Use-as-is   Suspected Unapproved   Therromagnetic   Use-as-is   Use-as	WORK ORDER NON-CONFORMANCE / UPD    Date   Date   Description of work order update   Description order   Descri	Date   Date   Disposition   Rework   Scrap   Use-as-is   Suspected Unapproved   Use-as-is   Large Fab   Composite	Date   Date   Date   Disposition   Rework   Scrap   Use-as-is   Suspected Unapproved   Use-as-is   Suspected Unapproved   Use-as-is   Use-as-is   Suspected Unapproved   Use-as-is   Use-as-as-is   Use-as-as-is   Use-as-as-as-as-as-as-as-as-as-as-as-as-as-	Date   Disposition   Rework   Skid-tube   Small Fab   Frot. Eng. Coor.   Rec/Store/Packaging   Large Fab   Composite   Sign & Outside Dimensions   Date   Step   Qty   Description of work order update   Oracks   Date   Date   Step   Qty   Description of work order update   Oracks   Date   Date	Date   Date   Disposition   Sign & Composite   Date   Prof. Eng. Coor.

DART AEROSPACE LTD —	Work Order:	115515
Description: Float Skidtube (412)	Part Number:	D3391-3
Inspection Dwg: D3391 Rev: I		Page 1 of 1

#### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments			
Lathe Section									
14.000	+/-0.010	14.000	/		tape	46-25			
3.500	+/-0.010	3504			VEVA	6-25 CWC-08			
Ø3.200	+/-0.010	3.201			ι)				
Ø3.750	+/-0.010	3-750			11				
30° x 0.060 chamfer	+/-0.010	30° × .060			ι (				
88.93	+/-0.030	88.93			tape	16-25			

Measured by: Date: 14/04/06

Audited by: Date:

	HAAS Section							
1.526	+0.000/-0.030	1.507	/	Vam	11-06			
7.500	+/-0.010	7,500	1	11				
27.750	+/-0.010	27,750		M-tape	11-08			
31.750	+/-0.010	31.750						
35.250	+/-0.010	35.250		9 (				
3.300	+/-0.010	3.297		Vein	ML-DL			
0.200	+/-0.010	200	سسر	11				
3.520	+/-0.010	3.578		۲۰				
0.687	+0.010/-0.000	-690	.–	11				
R0.062	+/-0.010	R.062		R-L-				
Ø0.484	+0.005/-0.001	18.485		Ven	11-101-			

Measured by: Date: 14/64/27

Audited by: Ft. Date: 14/04/28

Rev	Date	Change	Revised by	Approved
A	06.04.24	New Issue P/O D3391-015/-025	KJ/JLM	
В	06.06.19	Dwg revision update	KJ/JLM	
С	07.04.20	Ø0.208 dimension removed	KJ/JLM	
D	07.09.06	0.400 dimension removed	KJ/JLM	
E	07.11.23	Dwg Rev. updated	KJ/EC/DD	
F	09.04.27	Dimensions updated per Rev H and NCR09-028	KJ/JLM	
G	09.11.16	Dimension 0.200 removed	KJ	
Н	11.06.21	Dimension 44.995 removed	KJ	
1	12.05.15	Dwg Rev updated	KJ	
J	12.05.23	Dimension updated	KJ	
K	12.10.15	88.93 dimension removed	KJ 10	
L	12.11.28	88.93 dimension added	KJ 😽	A\

